

# TECHNICAL MEMORANDUM

## Utah Coal Regulatory Program

August 2, 2004

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TO: Internal File

THRU: Peter H. Hess, Environmental Scientist III, Team Lead, Engineering *PHH by CR*

FROM: Steve M. Fluke, Environmental Scientist II, Reclamation Hydrogeologist *SMF*

RE: Sealing South Portals, Canyon Fuel Company, LLC., SUFCO Mine, C/041/002,  
Task ID #1965

### SUMMARY:

The Division received an application from the permittee on June 21, 2004 to seal the South Portals. The South Portals are two intake portals that are located in Convulsion Canyon. In addition, the amendment removes all reference to the previously proposed Muddy Creek breakout. The decision to not complete the Muddy Creek portals has no bearing on the SUFCO mining and reclamation plan (M&RP) other than removing any reference to the breakout. This memo addresses the hydrology section of the regulations.

Based on the hydrologic review, the amendment should be approved.

### TECHNICAL ANALYSIS:

## OPERATION PLAN

## HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

### Analysis:

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**Acid- and Toxic-Forming Materials and Underground Development Waste**

According to Section 5.5.1 of the existing permit, Casing and Sealing of Underground Openings, the south portal closure is designed to keep water from flowing from the mine workings to prevent acid or other toxic drainage from entering ground and surface water.

**Gravity Discharges From Underground Mines**

The south portal closures are to be designed to keep water from flowing from the mine workings.

**Sediment Control Measures**

Prior to seeding, surface soils are to be roughened and deep gouged using hand rakes and shovels. Because of the small surface disturbance area at the South Portals (0.017 acre), this should be an adequate method to control erosion before the vegetation becomes established. If, however, it is observed that material is rolling down slope from the portal area during construction or the roughening and gouging of the surface soils is not adequate to control erosion, then sediment control measures using the best technology currently available should be applied to prevent sediment from reaching the stream channel below.

**Findings:**

The permittee has submitted sufficient information to address this section.

**CUMULATIVE HYDROLOGIC IMPACT ASSESSMENT**

Regulatory Reference: 30 CFR Sec. 784.14; R645-301-730.

**Analysis:**

No update to the Quitcupah-Muddy Creek CHIA is necessary due to the amendment.

**Findings:**

The permittee has submitted sufficient information to address this section.

**RECOMMENDATIONS:**

The permittee has provided sufficient information to amend their mining and reclamation plan (M&RP) to include the closure of the South Portals and the removal of reference to the previously proposed Muddy Creek portals. It is expected that sediment control measures as described in M&RP will be implemented during construction. The amendment should be approved.